Scheme 1

4a. R = *t*-butyl, X = H to **4b**. R = *t*-butyl, X = H and SO_3H (~1:1)^a **5a**. R = CH_2CH_2OH , X = H to **5b**. R = CH_2CH_2OH , X = SO_3H^b

Fig. 1

6a. $R = SO_3H$, X = H to **6b.** $R = SO_3H$, X = H

$$H_2N$$
 I_2N
 I_2N

Fig. 2

Fig. 3

4/11 REPLACEMENT SHEET

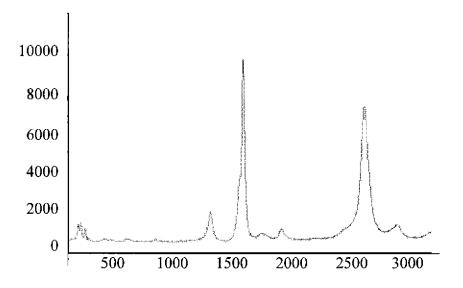


Fig. 4

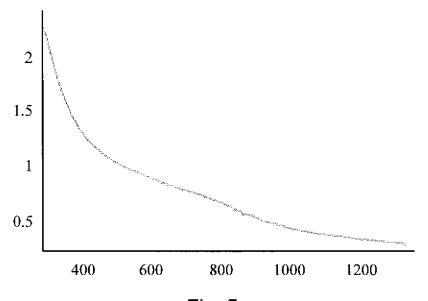
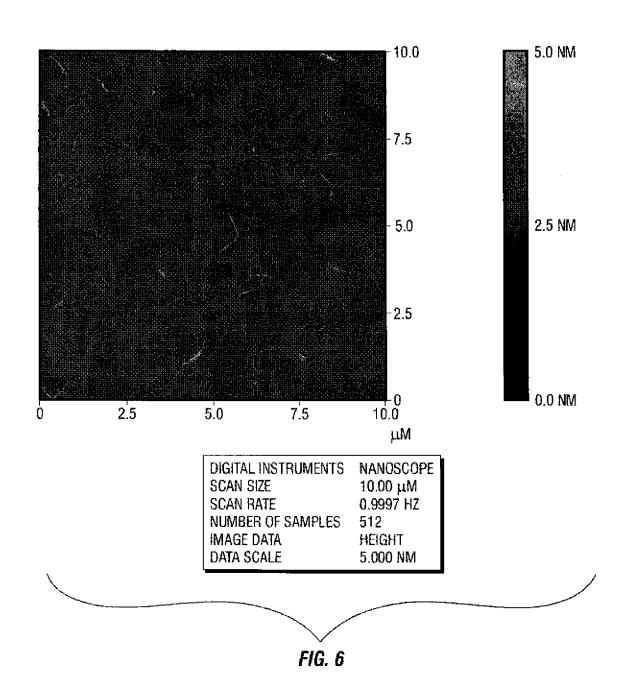
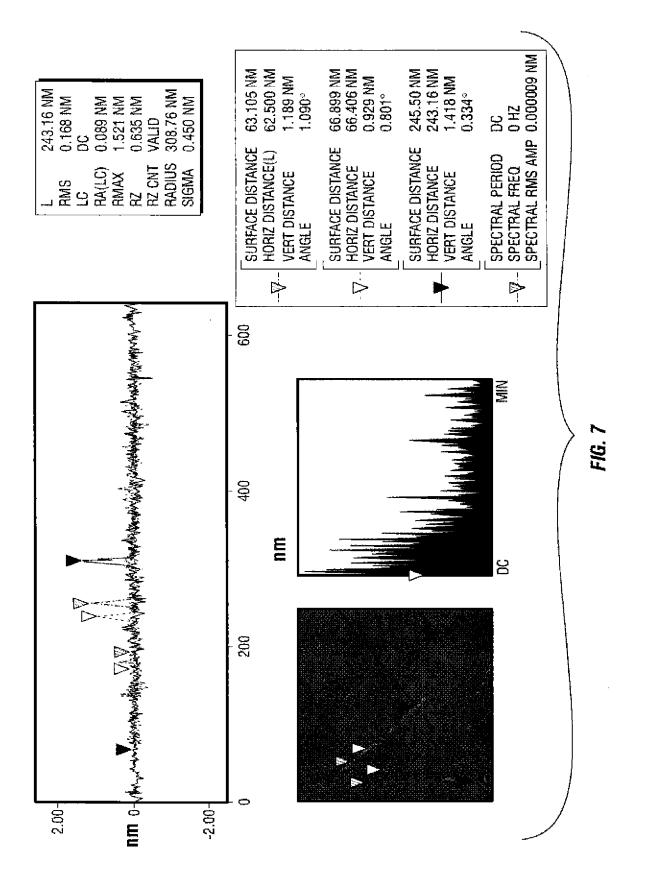


Fig. 5

5/11 REPLACEMENT SHEET



6/11 REPLACEMENT SHEET



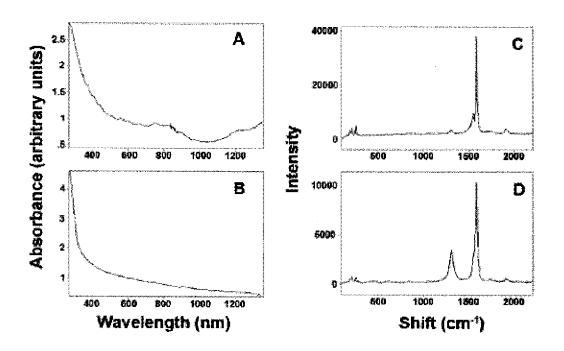


Fig. 8

8/11 REPLACEMENT SHEET

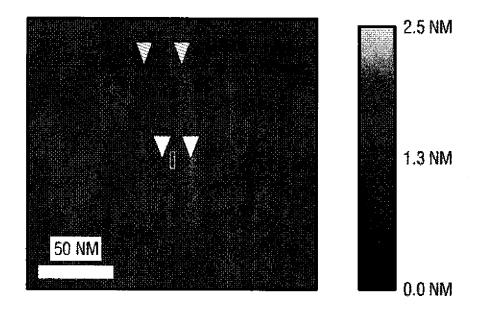


FIG. 9A

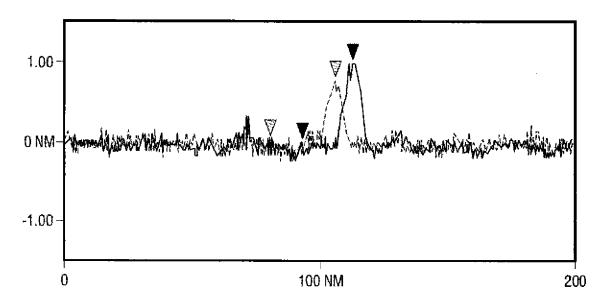


FIG. 9B

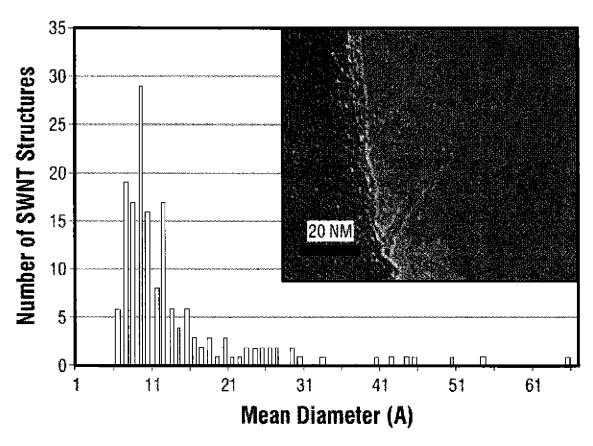


FIG. 10

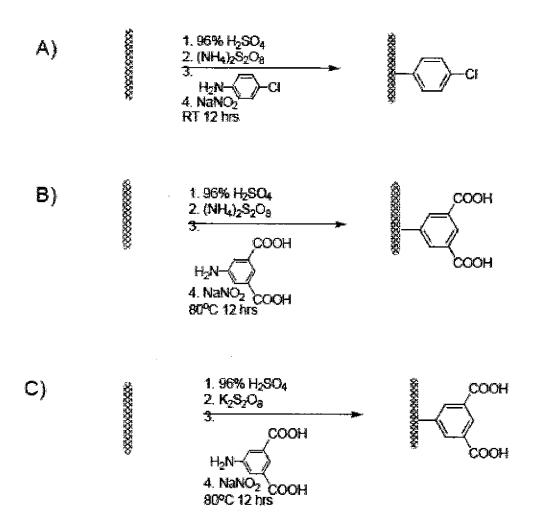


Fig. 11

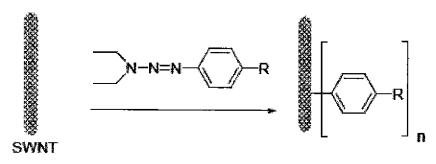
11/11 REPLACEMENT SHEET

Scheme 3

H-B = Acidic Media

Fig. 12

Scheme 4



R = Halogen, Alkyl, Ester, Amide, Ether

Fig. 13